

***Astragalus geyeri* A. Gray**

Geyer's milk-vetch
Fabaceae (Pea Family)

Status: State Sensitive

Rank: G3G4S1?

General Description: Grayish-strigose to greenish annual with spreading to erect stems 2-8 inches long; leaflets 5-13, linear to oblong, obtuse to retuse, $\frac{3}{16}$ to $1\frac{1}{8}$ inch long; racemes 2 to 7 flowered, shorter than the leaves; flowers $\frac{1}{4}$ to $\frac{5}{16}$ inch long, yellowish-white to pale lavender; calyx scarcely half as long as the corolla, the short linear-lanceolate teeth about $\frac{1}{3}$ as long as the tube; pods sessile, about $\frac{3}{4}$ inch long, membranous, greatly inflated, slightly compressed.

Identification Tips: *Astragalus geyeri* is the only *Astragalus* with an annual root and inflated unilocular pod, easily recognized by its habit, few distant leaflets, minute flowers concealed among the leaves, and by the pod itself, a strongly incurved, papery, unilocular bladder that reaches maturity within about six or eight weeks after germination of the seed.

Phenology: Blooms April through July, depending on local rainfall patterns. The plants ordinarily flower within 4-6 weeks of germination and the fruits mature rapidly.

Range: Disjunct in WA; a Great Basin and Snake River Plain species known from southeast Oregon to California and Nevada, and eastward through southern Idaho to Wyoming and Utah, and Grant County, Washington (Columbia Basin physiographic province).

Habitat: Depressions in mobile or stabilized dunes, sandy flats, and valley floors. Associated species include gray rabbitbrush (*Chrysothamnus nauseosus*) and Indian ricegrass (*Oryzopsis hymenoides*). Often, a high cover of annual weedy plants like cheatgrass (*Bromus tectorum*), Russian thistle (*Salsola kali*) and tumblemustard (*Sisymbrium altissimum*) is present. Aspect varies from southeast to northwest. Slopes are generally flat to 3% (one population has a slope of 30%). Elevation: 630 to 670 feet.

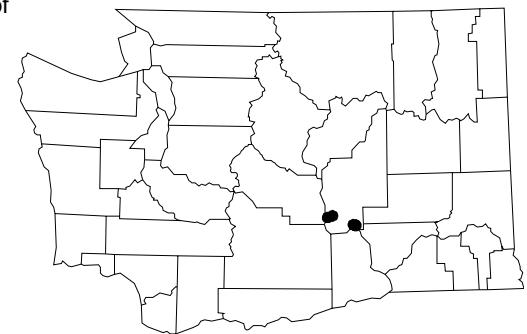
Astragalus geyeri

Geyer's milk-vetch



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Known distribution of
Astragalus geyeri in
Washington



● Current (1980+)
○ Historic (older than 1980)

Astragalus geyeri

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Photo by Jim Barrett



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Ecology: This taxon is found in the hottest and most arid valleys where its life span is ordinarily a matter of 3 or 4 months. Rainfall at the critical moment may prolong its active days until the base of the stems and the taproot become a little hardened or woody. If it is an unusually dry year, plants may only attain one or two inches in height before they bloom and set fruit. This is a nitrogen-fixing species which occurs on substrates suspected of being low in nitrogen.

State Status Comments: The species is disjunct in Washington, occurring only in Grant County.

Inventory Needs: Suitable habitats throughout the Columbia Basin should be systematically surveyed for additional populations.

Threats and Management Concerns: Threats to *Astragalus geyeri* populations include agricultural conversion, ORVs, and grazing.

References:

Hitchcock, C. L., A. Cronquist, M. Ownbey, and J.W. Thompson. 1961. *Vascular Plants of the Pacific Northwest, Part 3: Saxifragaceae to Ericaceae*. University of Washington Press, Seattle. 614 pp.